EQUIPMENT TRAINER'S HANDBOOK

One to One Equipment Training



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Hands On Training & Evaluation Guide

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Acknowledgments

FC 1-222 Rotary Wing Instructor Pilot's Handbook (US Army) (1985)

Effective Human Relations "A Guide to People at Work" *Paulus, P., Seta, C., Baron, B.* (1996)

Mastering the Instructional Design Process "A Systematic Approach" Rothwell, W., Kazanas, H. (1998)

Jou have been designated to become a trainer because you are recognized for your expertise and professionalism as an equipment operator. Now its time for you to pass those hard learned skills on to another.

This guide has been developed to help you recognize the learning differences in others, overcome obstacles and train individuals to an acceptable level.

Many senior operators can recognize training obstacles and teach other operators with very little difficulty. Other operators, with a high level of skill, don't know how to pass this skill to someone else. This publication is intended to assist all trainers and provide them with a standard reference for the instruction process.

In addition to demonstrating and repeating new skills, the trainer must become an evaluator. As a evaluator, the trainer must set aside personal affections and bias to grade the trainee's performance according to the published standards. Shortcuts in this process may allow a person to operate a piece of equipment and become a danger to co-workers or the public. The responsibility for a fair and proper evaluation belongs to you. Your professionalism in this task will insure the credibility of the program and the long term safety of all.

This publication is only offered as a general guide to trainers and not a definitive publication on Human Behavior or the Teaching Process.

Chapter

Human Behavior

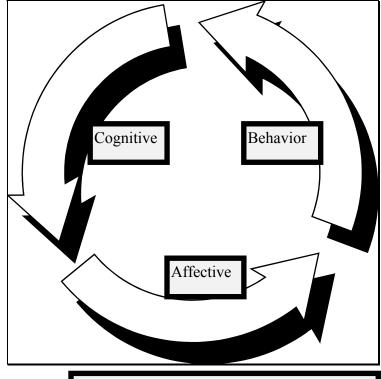
1-1 General:

The Washington State Department of Transportation recognizes the need for effective Equipment Trainers. As a designated and certified trainer, it is your responsibility to teach and evaluate the performance. How the teaching is accomplished depends largely on how well you understand how people learn and your ability to a adapt your teaching style to that process.

If you are to be effective, you must understand some parts of human behavior, apply this understanding to the process of learning, and exercise control over yourself and the teaching environment.

1-2 Equipment Operator's Behavior:

Equipment Operator's Behavior is the ability to perform a task within designated parameters or the ability to group many tasks together to complete a designated assignment. Your responsibility is to assist each operator trainee in acquiring new operator skills or to change faulty operator habits. To do this, you must have a basic knowledge of the <u>Cognitive</u>, <u>Affective</u>, and <u>Behavioral elements</u> of personality and how they interrelate to effect the learning process.



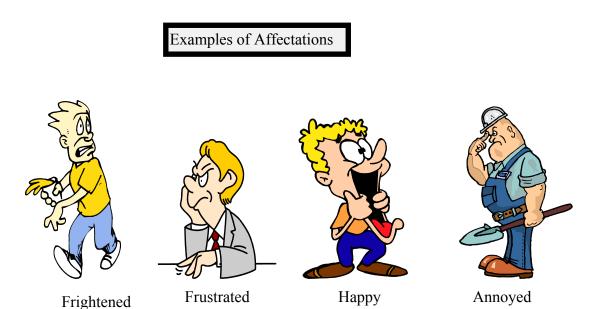
Interrelationship of Personality Elements

• <u>Cognition</u>: The cognitive element is the mental or intellectual part of the operator. It is the element of his/her brain that collects and orders information. When an individual studies and learns all the steps required to perform a certain task, he/she is using the cognitive process. When he/she orders this information into logical sequences he/she is also using cognition. Cognition is the process of storing and ordering information and the process of acquiring a conscious awareness of events and attaching meaning to them.

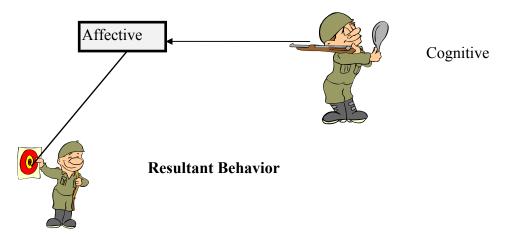


- Oil Pressure
- Maximum Speed
- Turn Radius
- Air Pressure
- Hydraulic Fluid
- Arm Installation
- Restrictions

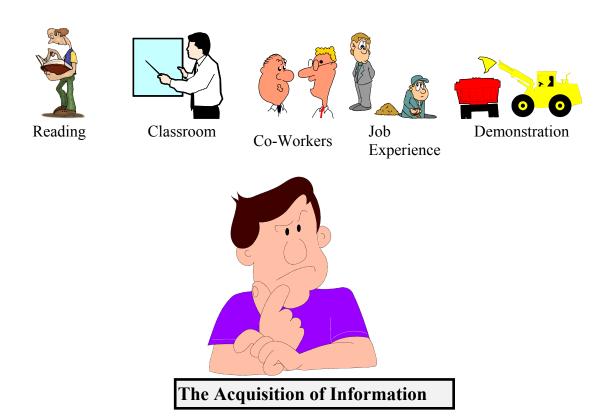
 Affectation: The affective element of the operator's personality includes his/her feelings, attitudes, values, and emotions. An example of an effective element is the feeling of discomfort when someone with who you are riding with drive faster on with less control than you would. Professionalism is an affective attitude, as a pride and distrust. Value of performance, such as smooth operation or a precise turn are affectations. The affective element may be related to the "Heart".



Behavior: Behavior is the observed physical action or response. Oral explanation and control inputs are behavior. Behavior is the resultant action or "Hands and Feet".



1-3. Information Sources



The illustration above shows that the individual receives information from many different sources. It may come from personal study, academic classes, from co-worker "stories", or from you. Through verbal instruction and demonstration, your main functions are to provide previously unacquired information or to change erroneous information. You, the trainer need to place all information in a logical sequence.

A trainee may, through study, acquire a volume of cognitive data. He/she will place this information into his/her brain as usable information. You, the trainer will, through conversation, demonstration, and verbal reinforcement give meaning and order to the related information.

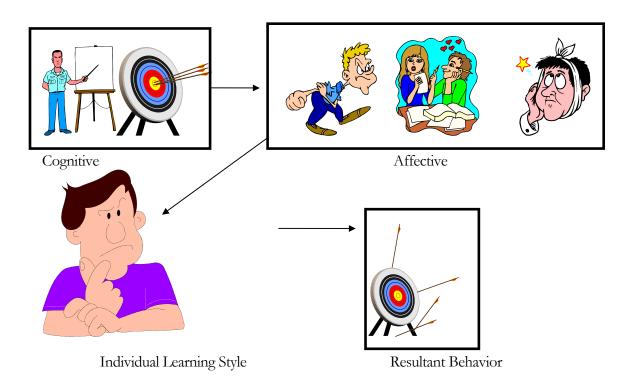
Once basic information, in the proper sequence, is placed in the cognitive element, acquiring and sequencing additional related information is relatively easy. Basic control movements and task requirements are taught early. These basic understandings are then built upon to accomplish almost every other task. This is reflected in the concept of teaching "From the Known to the Unknown". This building block principle is based on the premise that as information is ordered and behavior is accomplished, learning becomes easier and more complete.

1-4. Influencing Factors

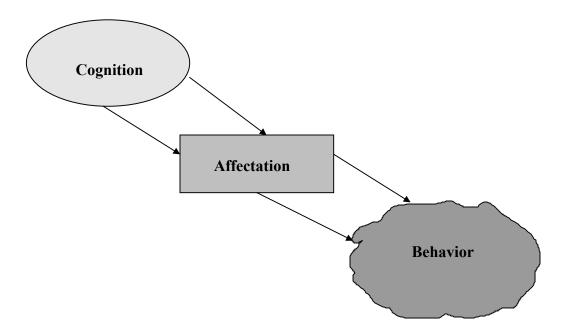
Ideally, once cognition has been acquired, the information will be sent to the hands and feet of the student by nerves; then appropriate behavior will be evident. If the students were mere machines, this would be true. But being living organisms, the muscles of the students' hands and

feet must practice using the information sent to them from the brain. As in any physical behavior, muscles must practice before behavior becomes automatic. The student will need to practice a task repeatedly before the cognitive commands are correctly interpreted by the muscles.

Human organisms have feelings, attitudes, values, and emotions. These affectations stand between cognition and behavior as the heart stands between the brain and the hands and feet. Before cognition can become behavior, it must be filtered through affectations. The individual may cognitively know how to do a task, and the muscles may know how to respond correctly, However, if feelings, attitudes, values, or emotions are not consistent with the cognitive information being filtered through them, the information may be short-circuited before reaching the muscles. Conversely, cognition supported by the appropriate affectations is strengthened to become proper operational behavior.



The illustration, on page 6 depicts that even if the appropriate cognition is uncontested as it filters through the affective element, it may not reach the nerves and muscles in a pure form. Physical factors affect behavior by disrupting muscle coordination. Fatigue and toxic chemicals are two examples of stresses that, once applied to the individual, may have an adverse effect on behavior by disrupting muscle coordination. Some forms of stress do not limit their effects on the individual's physical person. There are stresses that affect the affective element. In fact, the majority of stresses will, in some form, affect the individual emotionally. The areas most worthy of note will be discussed later as defense mechanisms.

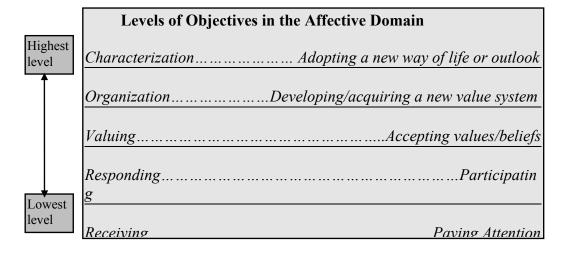


1-5. Designing Performance Objectives

a. In the book "Mastering the Instructional Design Process "A Systematic Approach" by William J. Rothwell and H. C. Kazanas, the authors separate learning into domains of performance type. As Equipment Trainers, we will not normally be designing training systems however a familiarity with the basics may be helpful.

The **Cognitive Domain** learning experience focuses on increasing the learner's **knowledge**. The Affective Domain experience focuses on changing the learner's **attitude**. The **Psychomotor Domain** focuses on building skills and modifying **behavior**.

Highest level	Levels of Objectives in the Cognitive Domain
	Evaluation Assessing the value of ideas, things, and so on
	Synthesis
	Analysis Disassembling a whole into parts
	ApplicationUsing what has previously been learned
Lowest level	Comprehension Knowing what a message means



	Levels of Objectives in the Psychomotor Domain					
Highest level	Complex Overt Response	Performing automatically with facility/habitually				
	Mechanism	Acting without assistance				
	Guided Responseassistance	Performing a task with				
Lowest	Set	Getting ready to perform				
level	Percention Obser	ving hehaviors involved in a task				

b. "Performance objectives make tangible a vision of what learners should know, do, or feel at the end of a planned instructional experience. They should contain statements about as least two of the following three components: 1) *Performance*, 2) *Criterion*, 3) *Condition*."

According to Rothwell and Kazanas "The *performance* component of an objective describes what a learner will be doing when demonstrating mastery of an objective at the end of a planned instructional experience. The *criterion* component of an objective describes how well the learner must perform in order to be considered acceptable. The *condition* component of a performance objective describes the important conditions (if any) under which the performance will occur.

- **C.** As Equipment Trainers, we will not normally be designing training systems. Under the normal training activities we will be concerned with 1) *Tasks*, 2) *Conditions*, and 3) *Standards*.
 - 1. *Task*—the individual actions, or series of maneuvers, which must be accomplished, in proper sequence, to perform a required duty.
 - 2. **Conditions**—specify the situation in which the task is to be performed and describe the important aspects of the performance environment.
 - 3. *Standards*—describe the minimum degree of proficiency or standard of performance to which the task must be accomplished.

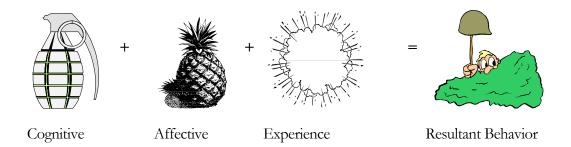
Learning Process

2-1 General:

Learning can be accomplished cognitively, affectively, or behaviorally. Learning, however, is always manifest as behavior. Behavior may be changed by altering one or both of the remaining parts of the student's personality. Cognition may be affected through explanation or demonstration. Affectations may be adjusted by example, or you may change behavior by training muscle response through practice. (Muscle Memory)

2-2 Definition of Learning:

To define learning, it is necessary to analyze and understand how experiences affect the three parts of the individual's personality. All experiences are learning experiences. The figure illustrates that as a result of a learning experience, an individual's way of perceiving and thinking (cognition), feeling (affectation), and doing (behavior) may change. Thus learning can be defined as "a change in behavior as a result of altered cognition and/or affectation." These alterations occur as a result of experience. Thus behavior is physical and overt; however it is controlled by intellectual or attitudinal stimuli. Learning does have certain characteristics. The professional instructor should understand and use them.



2-3 Characteristics of Learning:

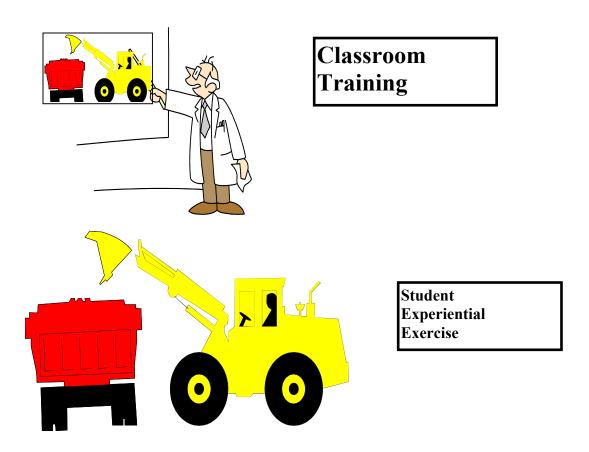
2. <u>Learning is Purposeful.</u> Each student sees a learning situation from a different viewpoint. Each student is a unique individual whose past experiences have established affectations that structure his/her willingness to learn and his/her understanding of the requirements involved. Purposes are goals established to meet certain affective desires. Purposes are most often supported by an individual's background (Past Experiences).

The student whose background, future goals, and purposes are task related may more thoroughly learn and be able to competently assimilate assigned material. The student whose desire is to merely comply with an instructor's assignment may make only minimal preparation. Given a student with the proper desires, you may help him/her to establish purposes that will facilitate learning. The student whose desires are not fully formed or are maladaptive presents a far greater challenge for you, the trainer.

You, as the trainer, need to be able to distinguish between purposeful learning or mere compliance. Students learn from any activity that tends to further their purposes. Their individual affectations and motivations will determine what they learn. In the process of learning, the student's purposes are of paramount significance. An effective trainer seeks ways to relate new information to the student's purposes.



- **b.** Learning comes Through Experience. Learning is an individual process because experiences are personal. Students learn from individual experiences. It is your responsibility, as a trainer, to provide the students with those experiences.
- (1) If an experience is to challenge a student, it requires involvement with feelings, values emotions, attitudes, thoughts, memories, and physical activities. In other words, for learning to be complete, an experience must challenge the student cognitively, affectively, and behaviorally.
- (2) The learning of a physical skill requires actual experience in performing that skill. Equipment operators learn to operate only if their experiences (including training) include operating equipment.

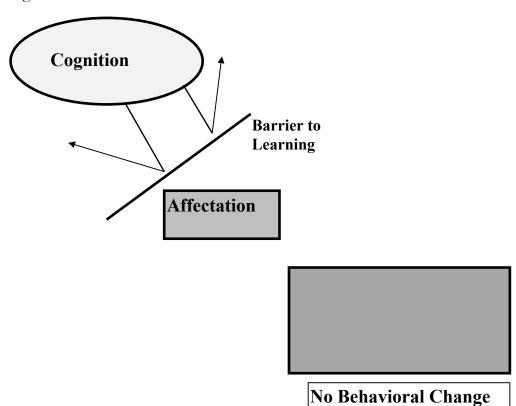


2-4 Laws of Learning:

a. <u>Law of Readiness.</u> Students are best when they are ready to learn. Knowledge and information are stored in the cognitive element any time the brain is stimulated. The process of information storage can occur even when a person sleeps. But remember, <u>knowledge does not become learning until behavior is evident.</u>

The cognitive element may store knowledge upon knowledge; however, that knowledge cannot become behavior without being filtered through the affective element. In the affective element, the law of readiness is activated. If the law of readiness is not activated, cognition cannot become behavior.

The trainer must prepare the student's affective element to accept learning. Filter cognition by providing a strong purpose, a clear objective, and a well-fixed reason for learning.

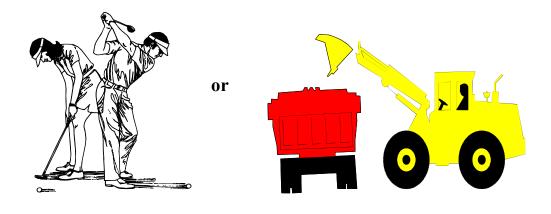


Law of Readiness

b. Law of Exercise. This law states that those things most often repeated are best remembered. It is the basis of practice and drill. The cognitive, affective, and behavioral elements are not infallible. They can rarely retain, evaluate, and apply new concepts or practices after a single exposure. It is generally understood that the brain and the muscles need practice. Also remember that feelings, attitudes, values, and emotions need frequent and repetitious exercise to become consistent. If not continuously monitored and strengthened, a student's affective element will revert to a previous structure.

Practice doesn't make Perfect! Perfect Practice makes Perfect!

Ben Hogan



c. <u>Law of Effect.</u> This law is based on the affective reactions of the student. It states that learning is strengthened when accompanied by pleasant or satisfying affectation and that learning is weakened when associated with a negative affectation. When the cognitive process is being affected, the affective element labels knowledge and information as positive or negative. Cognition becomes behavior (learning occurs) more easily if the affective element has a positive association with the process.



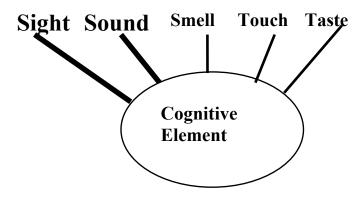
Negative Learning Experience



Positive Learning Experience

2-5 How People Learn:

a. Perception Initially all learning comes from perceptions that are directed to the cognitive element by one or more of the five senses (sight, hearing, touch, smell, taste). Sight and sound are the two primary perceptual inputs to the cognitive element. Learning occurs most rapidly when information is received through more than one sense. Perceiving involves more than the reception of stimuli from the five senses. Perceptions do not occur until the cognitive element gives meaning to sensations. Several factors effect the cognitive element's ability to give meaning to sensations. One is physical, and the remaining three are affective elements.



b. <u>Influencing Factors</u>

- 1. Physical Organism. The physical organism (the five senses) is the means by which individuals bring sensations to the cognitive element to become perceptions. A person whose perceptions distort reality may be denied the opportunity to train with complex equipment (Physical Exam). Acute problems explained as medical factors and chronic problems associated with illness or disease can change the perceptual apparatus for various periods of time. A head cold may distort hearing or balance. Constantly be aware of perceptual apparatus distortion in the student.
- 2. <u>Basic Need.</u> A simplistic view of a person's basic needs are to first protect and second to enhance self. How one pictures oneself is a powerful determinant in learning. Self-concept is an affective value and effects all perceptions. The affective element filters cognition before it becomes behavior; likewise, the affective element filters perceptual input before it becomes cognition. Before information (by way of experience) becomes cognition, it must be filtered through the student's feelings, values, attitudes, and emotions. Maslow hypothesized in his Hierarchy of Needs Theory that within every human being there exists a

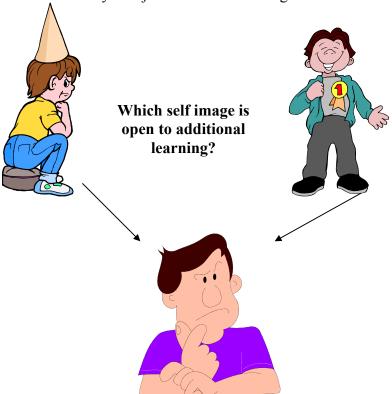
hierarchy of five needs. Glasser felt that Maslow's Hierarchy was incomplete. He authored five behavioral states which influence Maslow's needs.



Freedom
Survival
Belonging
Power
Fun

Where people make some choices Where people feel safe and healthy Where people feel cared about Where people feel important A sense of accomplishment

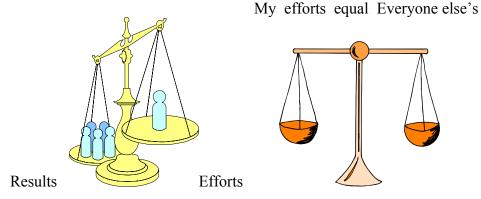
a. If experiences and information tend to support a favorable self-image, the student tends to remain receptive to subsequent experiences. If a student has negative experiences that contradict the self-concept, there is a tendency to reject additional training.



Reinforcement Theory: Behavior is a function of its consequences. In reinforcement theory, we have a behavioristic approach which argues that

reinforcement conditions behavior. Reinforcement theory ignores the inner state of the individual and concentrates solely on what happens to a person when he or she takes some action.

Equity Theory: Equity theory recognizes that individuals are concerned not only with the absolute amount of rewards they receive for their job efforts, but also with the relationship of this amount with what others receive.



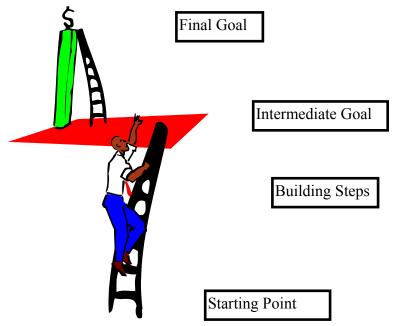
Expectancy Theory: Victor Vroom's expectancy theory argues that the strength of a tendency to act in a certain manner depends on the strength of an expectation that an act will be followed by a given outcome and the attractiveness of that outcome to the individual.



The theory asserting that workers' motivation is based on their beliefs about the probability that effort will lead to performance (*expectancy*), multiplied by the probability that performance will lead to reward (*instrumentality*), multiplied by the perceived value (*valence*) of the reward.

- 1. *Effort—performance relationship.* The probability perceived by the individual that exerting a given amount of effort will lead to performance.
- 2. **Performance—reward relationship.** The degree to which the individual believes that performing at a particular level to the attainment of a desired outcome.

- 3. *Rewards—personal goals relationship.* The degree to which organizational rewards satisfy an individual's goals or needs and the attractiveness of those potential rewards for the individual.
- b. Negative self-concepts inhibit the perceptual processes by introducing psychological barriers (defense mechanisms). These barriers tend to keep the student from perceiving or properly implementing what is perceived or properly implementing what is perceived.
- c. Helping people learn requires finding ways to aid them in developing better perceptions in spite of their defense mechanisms. Recognize that anything asked of the student that may be interpreted by the student as imperiling himself will be resisted or denied.
 - 3. Goals and Values Every experience and sensation that is funneled into the cognitive element is filtered by the individual's own beliefs and values. It is important to know the student's precise kinds of commitments and philosophical outlooks. This knowledge will assist in predicting how the student will interpret experiences and instructions. The "Goal Setting Theory" states that specific and increasingly difficult goals lead to higher performance. "specific hard goals produce a higher level of output than does of "do your best".



4. <u>Motivations</u>. Motivations are a product of one's affective element. Those things that are more highly valued and cherished are pursued; those of less value and importance are not sought. Positive motivations are those that enhance one's self image. Negative motivations debase or detract from and individual's view of himself/herself or his/her perception of how others view him/her.





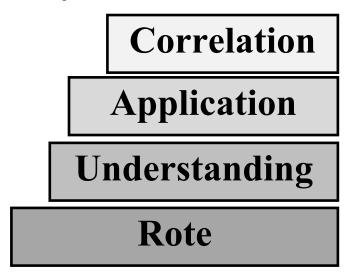
5. Threats. Fear is another affectation that has an effect on a student's perceptions by narrowing their perceptual field. Confronted with threats, students tend to limit their attention to the threatening object or conditions. For example, when an individual is critiqued repeatedly on speed control, his/her field of vision and cross check are reduces. Learning is a psychological problem, not a logical one. Cognition and Behavior are logical. Affectations are psychological. It may be logical to threaten or frighten the cognitive element. However, threats are not effective with the affective element. Realizing that input to and output from the cognitive element is filtered through the affective element, the good instructor will facilitate the learning process by keeping the affective element clear and open.





2-6 Levels of Learning:

a. Learning may be accomplished at four different levels. These levels are actually levels of memory. They are Rote, Understanding, Application, and Correlation. The figure below shows these levels from lowest to highest.



- 1. **Rote.** Rote is the simple memorization of information and the ability to repeat that action upon command. The cognitive memorization and the behavioral reciting of engine/speed limitations is an example of learning at the rote level. Information is supplied to the cognitive element, ordered, then repeated.
- 2. <u>Understanding</u>. Understanding is grasping the meaning or significance of the information learned by rote. Understanding occurs when cognition takes information stored at another time and relates it to the newly acquired information. Thus both elements of information are given new and greater meaning.
- 3. <u>Application</u>. Application is the ability to determine the particular purpose of the information and then put it into use or bring it into operation. Learning at the application level occurs when the student has the ability to put the information to a practical use.
- 4. <u>Correlation</u>. Correlation is the mutual relationship between different items of information. Correlative learning occurs when the student is able to express a complementary relationship between items of information.

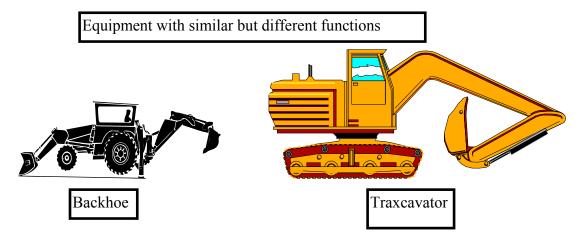
2-7 Forgetting and Retention:

- a. There are three theoretical elements of forgetting: Disuse, Interference, and Repression. **Disuse** is forgetting information not often used. **Interference** is forgetting a certain experience because a later experience overshadows it or the learning of similar things intervenes. **Repression** is forgetting because of the submersion of ideas into the unconscious mind. Material that is unpleasant or produces anxiety may be unintentionally treated in this way by the individual. It is unconscious and protective.
- **b.** Experimentation has suggested that everything an individual sees, hears, reads, does, experiences is stored in the brain. Infrequent use of cognitive information hampers the recall of this information to the conscious mind. Conversely, if information is used frequently, recall is easier. Disuse spawns forgetting; frequent use perpetrates retention.
- c. The muscles also have an inherent ability to forget through disuse. Infrequent practice of tasks slows reaction time and hampers coordination. Likewise, reaction time and coordination are improved with practice.
- d. Because affectations are acquired and reinforced through cognition and behavior, the affective element is greatly influenced by the quantity and quality of cognitive behavioral experiences. A deficiency in either quantity or quality of learning experiences spawns disuse. Information and skills that are not exercised are processed by the affective element as being unimportant. This attitude or value may generate a cycle of disuse—that is, forgetting, unimportance, and disuse.
- e. An example of cognitive interference is the confusion that may occur while trying to remember two different emergency procedures that have similar elements. If the elements of two bodies of information are similar, the retention of either body in its entirety is difficult.
- f. The affective element may be interfered with if conflicting values and attitudes are applicable to the same or similar situations. Affective interference most often occurs when your values and attitudes conflict with those of the operator. Interference may hinder retention. This requires you to use tact and different techniques to alter the operator's affective element.
- **g.** Behavioral interferences are those factors that may affect the physical manipulation of controls. The majority of these factors are grouped under medical factors.
- **h.** Repression is a psychological concept, and some theorists discuss psychological defense mechanisms in relation to forgetting and retention.

Since the defense mechanisms do not directly effect the memory process but only cover the exercise of memory.

2-8 Transfer Of Learning:

- Transfer of learning is the basis for the "building block" concept of teaching "from the known to the unknown." The cognitive elements of one task may so naturally apply to the elements of another task that associations and relationships between the two tasks are obvious. Thus if the cognitive elements of one task are learned, progression to a more complicated task through the addition of elements or the rearranging of previously learned elements is easier. Your responsibility is to see that cognition is complete and information is in a logical sequence before progressing to a more complicated task.
- **b.** The transfer of affectations is equally important. The values and attitudes relating to one task are carried into the related task. Control values such as excessive speed or smooth operation will be applied from task to task.
- **C.** Behavioral transfer is the most easily observed. The control input for one task may be applied for many others.



2-9 Formation of Habits:

Two factors are most important to you in habit formation. First, teach and require learning at the higher levels of learning. Forming the habit of learning at the higher levels is essential to prevent interference. **Rote** learning does not foster the transfer of learning. Secondly, evaluate your teaching techniques to ensure that cognitively, affectively, and behaviorally you teach so that the transfer of learning from one task to another is smooth and positive. Insist on correct techniques from the very outset to provide proper habit formation. Premature introduction of advanced or complex tasks perpetrates poor habit formation and inhibits future learning.

2-10 Obstacles to Learning:

a. Defense Mechanisms

1. In any situation where one individual is imparting information to another, the student may consciously or unconsciously feel the need to defend his/her affective element. This is done through the use of defense mechanisms. Defense mechanisms soften feelings of failure, alleviate feelings of guilt, and protect feelings of personal worth and adequacy. If these defense mechanisms are preventing cognition from becoming operational behavior, then knowledge of these defenses will assist in the dealing with both experienced and less experienced operators. The table 2-1 below groups defense mechanisms.

Variety	Specific Type	Characteristic
Denial : One perceives what one wishes, confirms one's own expectancies,	Denial	Seeing but refusing to acknowledge.
attributes cause for one's own benefit, and protects consistency	Projection Displacement	Attributing one's own feelings to another. Shifting of feelings from one
	Rationalization	object to another to avoid conflict. Justification of unacceptable attitudes of behavior

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Specific Type

Characteristic

Withdrawal: The challenge is processed in such a way that the challenge ceases to exist.

Isolation

Reaction/Formation

Regression

Separating the emotion from an idea.

Controlling unacceptable feelings by turning them into opposites.

Returning to a level of functioning used at a previous stage of development.

Controlling: By selective awareness, one can confuse oneself. In this way, control is maintained, confusion is decreased, and personal decisions are kept valid.

Suppression

Repression

Doing and Undoing

Somatization

Sublimation

Intellectualization

Conscious decision to avoid feelings.

Pushing ideas and feelings out of the conscious.

Performing a forbidden act in symbolic form.

Using physical symptoms as a defense against anticipated poor performance.

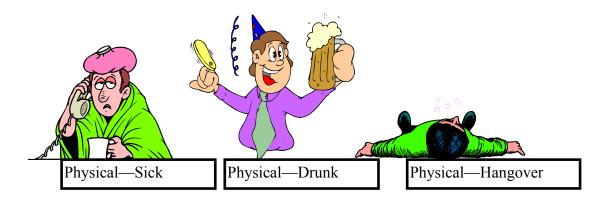
Gratifying an impulse by giving it a socially acceptable aim.

Thinking about a feeling instead of experiencing it.

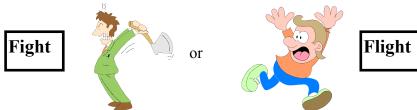
- 2. When defense mechanisms are present, learning, although hindered, still takes place. Defense mechanisms are a signal that the student's affective element is having difficulty coping with the stresses he/she is receiving. The skilled instructor will closely monitor this development and balance the cognition enhancing stress (produced by increased alertness) with the affective debilitating stress.
- **3.** These normal adaptive reactions become maladaptive when they are used to distort reality and end the learning process. Behavior is the most affected because the affective element alters an already narrowed cognition.

b. Normal and Abnormal Responses to Stress

1. Stress may be of two varieties: Physical stresses are those applied to the operator by medical factors. Emotional stresses are those that touch the affective element of the operator. Physical stress also has an effect of the affective element. If the operator is stressed physically beyond the body's ability to cope, his/her attitudes, emotions, values and feelings may be effected.



- 2. Emotional Stress produces anxiety. The normal cognitive response to tolerable anxiety is a heightened awareness and alertness. The operator who is preparing to initiate a difficult or dangerous maneuver is in a higher state of awareness than the operator practicing basic maneuvers. This higher state of awareness makes the operator more susceptible to learning and aids retention. As the senses become more attuned to sensations, the intensity of perceptions is magnified. The more intense the perceptions, the longer the learning lasts. When the affective element perceives the stress as tolerable, it allows the mind or cognition to extend this higher state of awareness to the muscles and behavior is enhanced within the limits of experience and training.
- **3.** When the affective element perceives the stress intolerable, it may distort the sensory apparatus. Perceptions, in turn, are distorted and cognitive input is incomplete. Stress can be of such a magnitude that behavior ceases. This, however, is rare. The most common affective response to intolerable stress is defense mechanisms.



2-11 Application of Principles:

- **a.** With the cognitive, affective, and behavioral model in mind, look at the student who is having difficulty with a particular task. There are several things that could be causing poor operational performance.
 - The student does not cognitively know how to perform a task.
 - One or more affectations are preventing cognition from becoming a behavior.
 - The student does not have the muscle coordination necessary to do the task properly because there is a lack of recent experience and training.
 - Medical factors are influencing the above items.

If the student is having difficulty with a task, isolate which of the above is the cause. Then through you own knowledge and experience, overcome the problem. This isolation is accomplished by taking the responsibility for two of the three personality elements. This leaves the student to perform in only one area.

1. To isolate cognition, have your student talk you through the task. This isolates cognition by requiring your affectations and your behavior to be used with his/her cognitive element. The figure illustrates using the student's cognition and your affectation and behavior to perform a maneuver. If he/she can tell you how to perform the elements of the task at the proper time and identify the confines of the standards, the chances are he/she cognitively understands the task.

Have the student talk you through the performance steps of the task.

If the steps are in order and the limitations are noted, the problem is <u>not cognition!</u>





If he/she is unable to talk you through a task, then cognition is not complete. Further demonstration and reinforcement will be needed.

Instructor

Cognition

Cognition

Affectation

Affectation

Behavior

Behavior

The figure illustrates the process of using the student's cognition and the instructor's affective and behavior.

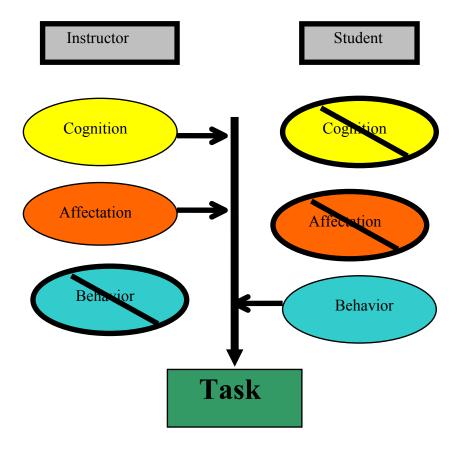
- 2. The affective element is standing between cognition and behavior is the student has talked you through the task but is unable to talk himself/herself through it because of--
 - Improper Sequencing.
 - Forgetting the elements of the task.
 - Inappropriate pauses during the presentation.
 - Inappropriate reflections.

An affectation is causing the student to focus on a particular element of the task. The above listed breaks in task description are a product of the cognitive element being focused by the affective element. There is no simple way to identify which inappropriate element is responsible for the disconnection. Consider what feelings, attitudes, values, and emotions may be preventing cognition from becoming behavior. Attempt to solve or alter them. Your experience and skill of the experience and skill of another instructor will help you in overcoming affective difficulties. Remember, the most often used affectations are the defense mechanisms

3. To isolate behavior or faulty muscle coordination, talk the student through the task. This technique uses your cognition and affectations.



Use your values, attitudes, and feelings in deciding when to continue or abort; thus relieving the student from those decisions. By using your cognitive and affective elements, the student's behavioral or muscle coordinative performance is evaluated. The figure below illustrates using your cognition and affective and the student's behavior to perform a task.



If the student can cognitively talk you through a task and operate the equipment while you talk him/her through it, then affectation is preventing his cognitive from producing a successful behavioral completion of the task. A more experienced student may isolate either his affective or his behavioral element by talking himself through a task. If the student talks himself/herself through the task correctly but is unable to control the equipment properly, it is probable that muscle coordination, due to a lack of recent experience, is the problem. Practice should solve the problem .

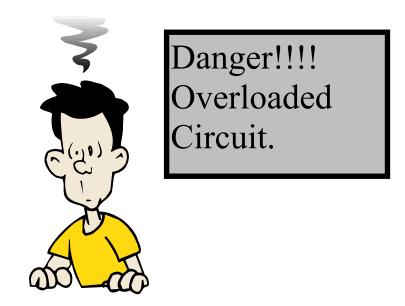
Note: Learning does not occur until the student has a opportunity to use his/her own cognitions and affectations. Continually contributing supplemental inputs does not give the instructor a satisfactory understanding of the student's abilities. This may explain why the student performs marginally when instructor verbalization is withheld.

- **4.** Finally, medical factors can influence any of the above situations. At every stage of the above process, medical factors should be considered and evaluated.
- **b.** A simple affectation can hinder an operational behavior.
 - 1. While training in a dump truck, at the dump site ,the student failed to sound the horn prior to backing the vehicle to the dump area. Given another chance at the maneuver, he/she made a different mistake. In repeated attempts, the student made a different mistake each time.
 - At some point after several attempts, you took over and said, "Here, let me demonstrate one for you."
 - Demonstration is not what the student needed. Demonstration only teaches to the cognitive element of the student.
 - Cognition was not the problem. The student had shown that he/she had cognitively understood the maneuver because he/she had performed each of the maneuver steps, in the proper order, at least once.
 - You did not have to have the student talk through the maneuver because he/she had already demonstrated the he/she knew what to do at the proper time.
 - You did not have to have to check behavior because each step was performed properly. It was not that the student could not do or did not know; he was forgetting to apply.

Although forgetting is a cognitive process, it is influenced by the <u>affective</u> <u>element</u>. The student might have been forgetting a maneuver step because he/she was focusing on the mistake in the previous maneuver. This affective focusing clouds the brain for a time. If another step is required during this

time period, it may be forgotten. The principle is also evidenced when missing a turn while driving or failing to remember if a stop light was red or green after going through it. Retention is hindered by other thought processes.

2. The chain of forgetting may be broken by going to another maneuver and putting distance between mistakes and performance. If a short break is not helpful, there may be other affectations hindering retention.



- Strive to instill a feeling of confidence, an attitude of professionalism, a value of attention to detail, and an appreciation for the job to be done. It may also be necessary to change an attitude toward a phase of instruction by increasing self esteem, dispelling anger and frustration by kindness, or instilling professional values such as integrity and safety by example. In all cases, the student will come to you with his/her affective element established n areas that will transfer flight instruction. For example, fear of performing a particular task may be carried from experiences that seem wholly unrelated to equipment operations. In this case, through demonstration, you can change fear to acceptance.
- d. Some affectations are unacceptable and must be changed. Others, although a hindrance, will need to be left intact. Once established, the affective element is not easily changed. It is much easier to redirect cognition than it is to change affectations. Re-teaching a task in a different manner or using a different technique is more successful than attempting to change affectation. Remember, flexible teaching techniques aimed at cognition are better than bullying and demanding a change in the affective element.

● It is your responsibility to establish or change cognition and to establish, change or circumvent affectations. If you can give the student the correct information and control the formation of attitudes, values and habits, then the correct operational behavior should be manifested.





Chapter

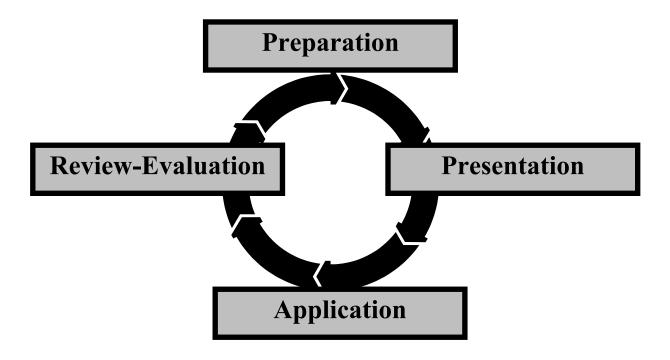
Teaching Process

3-1. General

The teaching process is cyclical. The final phase of review and evaluation is an integral part in planning the next lesson. In essence, it is a pre-assessment to the preparation of a lesson.

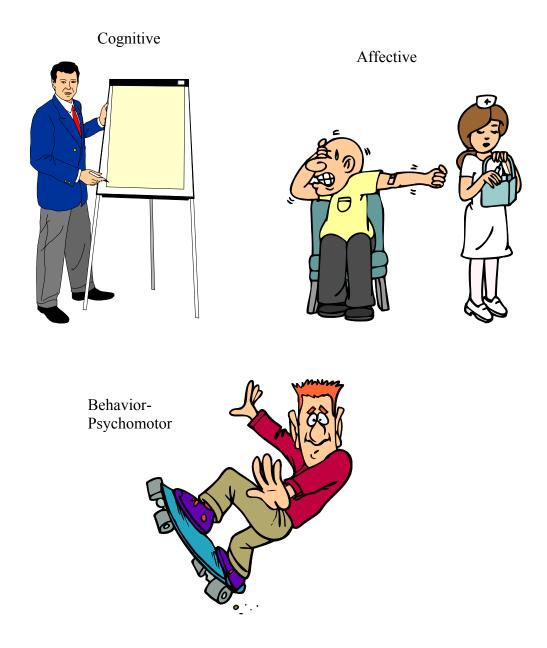
3-2. Using a Four-Step Teaching Process

All previously learned material must be put to a practical application to be able to teach someone. The learning process, human behavior, and effective communications are all tied together. Teaching can be broken down into four steps: **Preparation, Presentation, Application, and Review and Evaluation.**



a. Preparation.

1. In preparation for instructional period, whether it be operational or academic, decide to which of the three elements of the student's personality you intend to teach. Although the most successful lessons teach to all three elements, teaching may only focus on one or two elements. Teach to the cognitive element if giving information to be sequenced and stored for further use. Stimulate the affective element with values and attitudes. Train muscles to produce consistent behavior.



2. The most important factor in the preparation phase is the selection of goals and objectives for the lesson. The cognitive objective of a lesson plan should focus on one of the levels of learning. To establish or change a value or attitude should be the affective objective. The behavioral (Psychomotor) objective should be a demonstrated proficiency.

Elements	Objectives
Cognitive	Have the student list factors for a task (Rote)Have the student discuss the task (Understanding)Have the student demonstrate the task (Application)Have the student explain the consequences of not performing the maneuver correctly. (Correlation)
Affective	Have the student value smooth shifting movementsHave the student respect the damage and resultant down time from improper shifting.
Behavioral (Psychomotor)	Have the student demonstrate proper smooth shifting techniquesHave the student keep the vehicle centered in the
	lane while shifting through the gears.

- **Presentation.** The method of presenting material is dictated by the objectives. Verbal or textual presentations are the most effective ways of enhancing cognition. Your projected and stated attitudes and values influence the student's affectations more than any other factor. Do not allow the student to acquire his/her affectations randomly. Structure your presentation so that the desired student affectations are established.
- **C.** <u>Application.</u> Require the student to apply the information contained in your presentation within the parameters you establish. Structure the student's application of learned materials so that you can easily determine if deficiencies lie in cognition, affectation, or behavior. This method is described in Chapter 2, Paragraph 2-11.
- **Review and Evaluation.** With review and evaluation, the teaching process is complete and the cycle starts over again. Review and evaluation will help you determine how much of the instruction the student has retained. The primary purposes for this phase are to determine the effectiveness of your teaching and to pre-assess for the next lesson. Do not confuse this evaluation with the critique that is covered in Chapter 4.

3-3. Lesson Plan

The lesson plan is an organized outline for a single instructional period. It is a necessary guide that tells what to do, in what order to do it, and what procedure to use in teaching the material. Another instructor should be able to take the lesson plan and know what to do in conducting the same period of instruction. The lesson plan also helps you keep a constant check on your progress. It is concerned with limited objectives and should clearly state the desired student learning outcomes. Each lesson should contain new material and a review. The new material (facts, principles, Procedures, or skills) should be related to a lesson previously presented. Each lesson plan should contain the following items:

- Lesson Objective
- Elements Involved
- Schedule
- Equipment
- Instructor's Actions
- Student's Actions
- Completion Standards
- A lesson plan for an instructional, academic or operational period should be appropriate to the background, experience, and ability of the particular student or group of students. There is no certain way to predict the reaction of a group of students or an individual student. Because of deficiencies in the student's knowledge or poor mastery of elements essential to the effective completion of the lesson, a lesson plan may be modified during a operational or academic instruction period.
- b. Developing lesson plans signifies that instructors have taught the lesson to themselves before attempting to teach the lesson to students. When adequately developed, each lesson falls logically into the four steps of the teaching process. Sample lesson plans for 90 minute academic and operational lesson plans are shown in figures 3-1 and 3-1. Lesson Plans may be further expanded as required.

Lesson: Normal	Maneuvering of a Dump Truck Date:
Objective	To develop the student's understanding of maneuvering the dump truck through normal traffic and normal operations.
Elements	Straight and Level driving Turns Negotiating hills Recognizing Danger situations
Schedule	Straight and level driving
Equipment	Dump Truck Roadway Selected slides Chalkboard
Instructor's Action's	Discuss lesson objective. Discuss concept of Driving a Dump truck. Demonstration using training aids Assign each student tasks of demonstrating the controls on a dump truck. Critique student's presentation and ask questions.
Student's Actions	Discuss lesson objective. Listen, take notes, and ask pertinent questions. Visualize maneuvers. Present maneuvers and respond to instructor's questions.
Completion Standards	The student should demonstrate, by means of an oral quiz or written test, the he/she has an understanding of the concept of dump truck operations and of the performance of basic maneuvers.

3-4. Academic Instruction Techniques

- **Methods of Organization.** Success in teaching depends upon your ability to organize material. Decide upon the lesson objectives and state them in terms of desired specific changes in behavior. Gather the necessary course materials. Then organize the lesson to develop and support the learning outcomes. The instructor's actions are generally organized into three sections; Introduction, Development, and Conclusion.
 - 1. The introduction sets the stage for learning. It should indicate what is to be covered during the lesson and its relationship to the entire course. It should also point out specific benefits the student can expect to gain from learning and establish a receptive attitude toward the subject.



- 2. Logically organize the development stage to show the relationship of the main points. Under each main point in a lesson, the subordinate points should lead naturally from one to another. Meaningful transition from one main point to another keeps the students oriented to where they are, aware of where they have been, and where they are going. Usually, the main points are developed in one of the following ways: From past to present; Simple to complex; Known to unknown; or Most frequently used to least frequently used.
- **3.** An effective conclusion retraces the main points of the lesson and relates them to the objective. This reinforces the student's learning and improves retention.
- **Methods of Teaching.** The teaching methods are considered the tools of the instructor's trade. Success depends upon the ability to select and use a teaching method appropriate to a particular lesson. Several

teaching methods are commonly used. In a particular situation, an instructor may use more than one method. For example, a good demonstration is usually accompanied by a thorough explanation, which is essentially a lecture. There are many different type of training processes for the adult learner, however, we will only address the lecture method, guided discussion method, demonstration-performance method, and programmed instruction method.

- **1.** <u>Lecture Method.</u> Oral presentations take several forms and may have various purposes. The most common forms are the—
 - **Illustrated talk.** The speaker relies heavily on visual aids to convey his/her ideas to the listeners.
 - **Briefing.** The speaker presents a concise array of facts to the listeners, who do not expect elaboration or supporting material.
 - **Formal Speech.** The speaker's purpose is to inform, persuade, or entertain.
 - **Teaching Lecture.** The instructor must plan and deliver an oral presentation in a manner that helps the student reach the desired learning outcomes.

OUTLINE	INSTRUCTIONAL AID	
1. Introduction	Slides on Truck Transmissions	 Attention—make a statement that relates the lesson to the student's goal of being a proficient truck operator. Motivation—provide student's reasons for needing to learn proper transmission usage techniques. Overview—discuss lesson objective and key ideas to be presented.
2. Development	Video of Truck Transmission Failures Broken Parts Power curves Slides	 Discuss concept of power ranges Present video Show charts Show broken parts
3. Conclusion	Owner's Manual	 Retrace important points related to elements of knowledge presented, and relate them to the lesson objectives. Determine whether the students have met the objective of the lesson by a short oral quiz or written test. Assign students study of owner's manual.

a. The success of the teaching lecture depends upon your ability to communicate effectively with the class as well as the ability to plan, develop, and support the lesson. You must determine the method of development to be used; that is, past to present, simple to complex, and so forth. In developing a lesson present a number of main points or key points that support the overall objective and help the student visualize, know, or understand these by establishing the objective and desired outcomes, researching the subject, organizing the material, and planning productive activities.

- b. The teaching lecture is used primarily to introduce students to a new subject. In addition, it is also a valuable method for summarizing ideas, showing relationships, between theory and practice, and reemphasizing main points. It may be used to introduce a complete training program or a unit of instruction. It may also be combined with other teaching methods to give added meaning and direction.
- 2. Guided discussion method. In the guided discussion method, the students actively participate in class discussions. This method relies on the students to provide ideas, experiences, opinions, and information. Remember that the more intense the discussion and the greater the participation, the more effective the learning will be. In the guided discussion, learning is produces through the skillful use of questions. However, unless the students have some knowledge to exchange with each other, they cannot reach the desired learning outcomes by discussion method. In preparing questions, remember that the purpose is to bring about discussion, not merely to get answers. Good lead questions should usually begin with "how" or "why". To encourage enthusiasm and stimulate discussion, create a relaxed, informal atmosphere, while ensuring that the class does not veer from the intended objective.
- **3.** <u>Demonstration-Performance method.</u> This method is desirable for presenting a specific skill such as a lesson on the 800 Mhz. Radio. This method has five essential phases. They are:
 - 1. Explanation
 - 2. Demonstration
 - 3. Student Practice
 - 4. Review
 - 5. Evaluation
- **4. Programmed Instruction.** Programmed instruction is a method of instruction that the student must make a response to each increment of instruction. This method is based largely on immediate reinforcement for accurate performance.

3-5. Instruction Techniques

Many training accidents occur because the instructor is, either, too trusting in the student's performance abilities, or the instructor is complacent and not concentrating on the performance of the student. You as the instructor must be aware of potential problems and be ready to use appropriate corrective action to avoid a mishap. Because you normally do not have access to the controls of the equipment in order to take corrective action, you must first insure the student's proficiency before you expose the public or co-worker to the inexperienced trainee.

- **a.** You must insure that the student understands the proper sequence of actions without interference or misunderstanding.
- **b.** You must insure that you <u>and</u> the student are concentrating on the task at hand.
- **c.** All accidents are caused by a broken chain of events. This third deficiency is controlled by trained awareness. Your intuitiveness as a seasoned operator will be critical in avoiding accidents.
- **d.** The instructor's calmness and precise instructions throughout the training and evaluation sessions will assist in breaking the accident chain.

Chapter

Instructor-Evaluator Process

4-1. General

In maintenance there is a tendency to view instructing and evaluation as the same task. These tasks are different:

In the mode of **trainer**, you are the teacher. You teach a student to operate a piece of equipment in the prescribed and proper manner utilizing the operator's and procedures manual and your experience as a guide.

As an **evaluator**, you must observe the student, compare their actions with a published performance standard. You as the evaluator must set aside your personal concerns for the student and measure their performance. You should not measure the student in comparison to your expertise, but to a set minimum standard.

You will spend the majority of your time evaluating student performance. Evaluation and preassessment are prerequisites for instruction. For every demonstration of a maneuver, you will evaluate the student's performance of that maneuver many times. It is assumed that the ability to perform will automatically generate the ability to discover incorrect performance. The ineffective instructor is generally not deficient in knowledge or technique, but that he/she is inefficient in evaluation. It is not that he/she cannot teach but that he/she cannot or will not observe. Consequently he/she either teaches the wrong thing or allows inefficient or unsafe habits to be learned.

4-2. The Instructor's Role

Evaluation is as much a part of your instructor's responsibilities and instruction. The evaluation responsibilities will be both informal and formal.

a. Informally, before the beginning of any instructional period, you must determine the student's level of knowledge and proficiency. Only after making this preassessment will you know where to begin your instruction.

b. Formally, you evaluate your student operators. The basic expectations for safe and proper operation should be outlined in the equipment operator's manual.

4-3. The Instructor's Role in Communications

Communication takes place when one person transmits ideas or feelings to another person. The process of communication is composed of three elements:

- The source
- The symbols used in composing and transmitting the message
- The receiver
- **a.** The effectiveness of communication is measured by the similarity between the idea transmitted and the idea received. A communicator's effectiveness depends primarily upon two basic factors



- 1. First, the source must possess a large amount of cognitive information from which to select words that convey ideas. The greater the source's knowledge in a given subject area, the greater his/her ability to select symbols that are meaningful to the receiver. The source cannot communicate at a higher level of learning than he himself already possesses. The successful instructor is one who is not content with rote information. He correlates information and expresses his/her understanding in symbols that produce clear and defined pictures in the receiver's cognitive element.
- **2.** Second, communicators, consciously or unconsciously, reveal affectations toward themselves, the receiver, and the ideas they are trying to transmit.

- If a source is not confident in his knowledge of a subject area, this lack of confidence is transmitted to the receiver. The receiver then loses confidence in the source, and communication is hampered.
- Any negative feelings the source may have concerning the receiver's person or abilities are communicated to the receiver, and defense mechanisms prevent further communication.
- The source, that has disdain for the ideas or information communicated, will transmit negative affectations to the receiver. The receiver may cognitively remember the material, but the affective element will prevent cognition from becoming behavior. The source must believe that the information is important and that the receiver needs to know and remember it

Communication itself is a behavior; therefore, the source of the cognitions or the affectations influences that behavior.

b. Understanding these few principles about communication should make you a better transmitter of ideas or feelings. This same understanding will also make you a better listener. Remember these principles. Make adjustments in your listening process to compensate for the lack of student understanding and skill in communicating.

4-3. The Instructor as a Critic

No skill is more important to you than the ability to analyze, appraise, and judge student performance. The student looks to you for guidance, analysis, appraisal, suggestions, and encouragement.

- **a.** A critique may be either oral, or written, or both. It should come immediately after a student's individual or group performance while the details of the performance are easy to recall. It may be conducted in private, or it may include the other students in the class. When presented before other students, it can be beneficial to the other students as it is to the student who performed the exercise or assignment.
- **b.** Two common misconceptions about the critique should be corrected at the outset. First, a critique is not a step in the grading process. It is a step in the learning process. Second, a critique is not necessarily negative in content. It considers the good along with the bad, the whole in terms of parts, or parts in relation to the whole or to each other. A critique can be as varied in content as the performance.
- **c.** Students must understand the purpose of the critique. Otherwise, they cannot accept the criticism offered, and little improvement can be expected. The critique could provide direction and guidance to raise

- the student's level of performance. It should provide them something constructive with which they can build.
- **d.** An effective critique has several basic elements. To be effective, a critique should encompass the following characteristics:
 - A critique should be objective. The effective critique is focused on student performance and should not reflect your personal opinions, likes, dislikes and biases. To be objective, it must be honest. It must be based on the performance as it was, not as it should have been
 - <u>A critique should be flexible</u>. Fit the tone, technique, and content of the critique to the occasion and the student. Always be able to allow for variables.
 - A critique should be acceptable. Before students willingly accept your criticism, they must first accept you. Students must first have confidence in your qualification, teaching ability, sincerity, competence, and authority. If a critique is fair and presented with authority, conviction, sincerity, and confidence, a student will probably accept it as such.
 - <u>A critique should be comprehensive</u>. A comprehensive critique is not necessarily a long one. It does not have to treat every aspect of the performance in detail. Decide whether greater benefit will come from a discussion of a few major points of a number of minor points. An effective critique covers strengths as well as weaknesses.
 - A critique should be constructive. A critique is pointless unless the student profits from it. Praise for praise sake is of no value. The student must be taught how to capitalize on things that are done well and to use them to compensate for lesser accomplishments Likewise, it is not enough to identify fault or weakness. Give positive guidance for correcting the fault and strengthening the weakness. Omit negative criticism that does not point toward improvement of a higher level of performance.
 - A critique should be well organized. Unless a critique follows some pattern of organization, a series of otherwise valid comments may lose their impact. An effective organizational pattern might be the sequence of the performance itself. Sometime a critique can profitably begin with the point where a demonstration failed and work backwards through the steps that led to the failure. A success can be analyzed in a similar fashion.
 - <u>A critique should be thoughtful.</u> An effective critique reflects your thoughtfulness toward the student's need for self-esteem, recognition, and approval from others. Never minimize the inherent dignity and importance of the individual. Ridicule, anger, or fun at the expense of your student has no place in a

- critique. There are occasions when you should criticize the student in private. While being straightforward and honest, always respect the student's personal feelings.
- A critique should be specific. Comments and recommendations should be clear. Telling a student that his/her second maneuver was not as good as his/her first has little constructive value unless the student learns specifically what made the first approach better than the second approach. Students cannot act on recommendations unless the know specifically what the recommendations are. At the conclusion of a critique, students should have no doubt that they did well, what they did poorly, and specifically how they can improve.

4-5. The Professional Instructor

Professionalism exists only when a service is performed for someone or for common good. It is based on study and research and is achieved only after extended training and personal preparation. Professionalism presupposes an intellectual requirement. Professionals must be able to reason logically and accurately. Professionalism requires the ability to make good judgmental decisions. Professionals cannot limit their actions and decisions to standard patterns and practice. Finally, professionalism demands a code of ethics. Professionals must be true to themselves and to those they serve. Anything less than a sincere performance is quickly detected and immediately destroys the professionals effectiveness.

- a. You must have unconditional positive regard for the student. Accept the student as he/she is. Your personal likes or dislikes should not effect the quality of your instruction. The student may view you as the paragon of ability and may attempt to imitate you. Operational practices must stay within the dictates or regulatory publications and accepted practices. As a professional equipment instructor you should—
 - Set the highest standard of appearance. Offensive personal habits degrade the learning environment. Avoid offensive language. Wear prescribed equipment in the proper manner. Language and appearance should command respect and demonstrate pride in one's profession.
 - 2. Never become complacent or satisfied with your own qualifications and ability. You must be constantly alert for ways to improve yourself professionally.
 - 3. Be courteous to man and machine.
 - 4. Be straightforward and honest.
 - 5. Be calm, thoughtful, nonjudgmental, and disciplined. Your attitude can contribute much to a professional image.

b. The instructor has been pictured as a scientist; thus cognitively requiring him/her to amass a vast knowledge of pertinent facts and data. The true professional instructor is an artist, an architect of thoughts, movements, emotions, feelings, attitudes, and values. Scientific principles and techniques are the foundations upon which a professional instructor builds. However, applying these principles and techniques to the learning process is as artistic as any creative endeavor. Strive to learn the science of your profession so that you may be creative in its expression.

Evaluation Guide

5-1 Evaluation Guidelines

The evaluation is conducted to determine the operator's ability to perform the appropriate duties. It is administered for initial designation or validation of designation to the assigned duty position. The evaluation sequence consists of four phases as outlined below. The evaluator in the final authority on the amount of time devoted to each phase.

PHASE I—Introduction. In this phase the evaluator:

- a. Introduces him/her self to the examinee.
- b. Reviews the examinee's records to verify that the examinee meets all prerequisites for the examination.
- c. Insures that the examinee has all the required equipment
- d. Confirms the purpose of the evaluation and discusses the standards and criteria to be used.

<u>PHASE II—Oral Examination.</u>—in this phase the examinee must have a working knowledge and understanding of all applicable topics. He/she must respond correctly to questions selected by the evaluator.

- a. Regulations and Publications
- b. Operating Limitations and restrictions
- c. Emergency Procedures and malfunctions
- d. Operating dynamics
- e. Operational Tasks

<u>PHASE III—Operational Tasks.</u> –This phase consists of a operator's briefing, pre-operations check, start-up, mission tasks, shutdown procedures.

- a. Briefing—the evaluator will explain the tasks to be completed.
- b. Pre-operations check—the examinee will conduct the pre-operations check in accordance with the appropriate operator's manual.
- c. Operations Tasks—the examinee will carry out the evaluator's instructions using safe operating procedures and current standing operational procedures.

d. Equipment Shutdown and completion procedures—the examinee will shut down the equipment in accordance with the appropriate operator's manual and current operational procedures.

PHASE IV—Debriefing.—during this phase, the evaluator will—

- a. Use the appropriate forms.
- b. Discuss with examinee, the examinee's strengths and weaknesses.
- c. Offer the examinee recommendations for improvement.
- d. Tell examinee whether he/she passed or failed the evaluation.
- e. Complete applicable forms. Insure that the examinee reviews and signs the forms.



Equipment Training/ Evaluation Grade Slip

Examinee/	Name		SS	SN	Region
Trainee (Print)	Area Org Co		de	Supv.	
Evaluator/	Name		S	SN]	Region
Trainer (Print)	Area Org (Supv.	•
(Time)	- mea			·	
			Гraining Time I -	Jata	
Total WSDC	VSDOT Hours Total Training Hours				
			Type of Equipme	ent	
Dump Tru	ick Dump	Truck w/	PupDump Tr	uck w/ Plow	
Front End	LoaderG	rader _	Bull Dozer	Excavator	
Back Hoe	Vactor _	Sweepe	erManlift(Other	
	M	ake and	Model of Equip	ment	
		Eva	aluator Recommen	dations	
_Issue _Vali	idate Status a		Limited Oper.	Operator	Trainer
_Suspend _	Suspend _ Revoke Duties as				
_Requires a	dditional Tra	aining			
I have debriefed the	e Examinee or Train	ee and inforn	ned him/her of the status		
Evaluator's or Instr	ructor's Signature: _				
I have been debrie	fed by the Evaluator	or Instructor	and understand my curre	ent status	
Examinee's or Trai	aminee's or Trainee's Signature:				
Grade: S U N	IA Date:				

COMMENT SLIP

Instructor's Initials	Examinee's Initials
msuucioi s initiais	Examinee's initials